technologies besides carrying out basic research at the frontiers. The initiative includes R&D programme, strengthening characterization and infrastructure! facilities, creation of centres of excellence, generate trained manpower, interface between educational institutions and industry for applications etc. Target areas of R&D include both basic research in nano science in areas such as DNAchips, molecular electronics, quantum structures including dots, nanotubes & wires, nanobiology, nanofabrication, nanolithography and applied technology oriented research in ares such as composite materials with high strength-to-weight ratio, new biomedical solutions for chronic diseases, new drugs and targeted drug delivery, affordable nanoscale miniaturized medical diagnostic and treatment devices, improvements to computing, sensing, communications, data storage etc. On the manpower development front, advanced schools and International/National symposia and training workshops for research scholars/students have been held. Recognizing the growing scientific importance and emerging technological opportunities in this area of research and to formulate a policy guideline, a national-level consultation among scientists and technologists and S&T agencies (namely DST, DRDO, CSIR, DBT) promoting this area was organized. This consultation process has resulted in a major National programme titled 'Nano Science & Technology Mission (Nano Mission)'. The Nano Mission includes components like R&D programme, development of educational resources, establishing centres of nanotechnology, technology transfer though mechanisms such as public-private partnerships, skilled workforce and to support responsible development of nanotechnology.

**Central scheme to assist young scientists**

1111. SHRI C. PERUMAL: Will the Minister of SCIENCE and TECHNOLOGY be pleased to state:

(a) whether it has been decided to liberalise the central scheme to assist young scientists;

(b) if so, the details thereof; and

(c) what steps have been taken to check brain drain?

THE MINISTER OF SCIENCE & TECHNOLOGY (SHRI KAPIL SIBAL): (a) to (c) Developing and nurturing of human resource in Science & Technology has always been on top of the Government's agenda. The

Government has instituted several schemes to assist young scientists. Some of them are as follows —

- Ramanujan fellowships to attract brilliant scientists including young scientists from all over the world;
- JC Bose fellowships to recognize active scientists who have a proven outstanding track record;
- Ramanna fellowships aimed at supporting outstanding project investigators on a continuous basis;
- Shyama Prasad Mukherjee fellowships targeted at talented postgraduate students;
- CSIR Diamond Jubilee Technology Awards for Innovators for developing technology of highest benchmarks of competitiveness;
- Women Scientists Scheme to provide opportunities to women scientists to re-enter mainstream research;
- Indian National Science Academy and Indian Academy of Sciences Young Scientists/Young Associateship Awards Swarnajayanti fellowships for outstanding young scientists;
- Biotechnology Post-Doctoral fellowships Bioscience Awards for career development;
- Fast Track Scheme for Young Scientists for granting research projects to young scientists with or without employment;
- CSIR Young Scientists Awards etc. All these initiatives are aimed at providing encouragement and assistance to young scientists and checking brain drain from the country.

**Stem Cell Research**

1112. SHRIK. RAMA MOHANA RAO: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government are thinking of formulating a policy on Stem Cell Research;

(b) if so, the details thereof;

(c) whether Government are taking any assistance or help from the US on Stem Cell Research; and